PARK IT!

Burlington

Comprehensive ~~parking~~ Parking ~~Innovation~~ Management ~~p~~Program

The Comprehensive Parking ~~Innovation~~ Management Program is based on ~~the SIX~~ FIVE key themes of demand, supply, location, time &~~,~~ pricing, and user experience~~, and supply~~. This strategy brings to bear parking know~~-~~-how based on timeless principles of human behavior to the latest in cutting-edge technological advancements. Simply put, what we need to do is:

- Manage demand for parking by providing more convenient choices for commuters and residents
- Manage the existing supply more efficiently and effectively
- Add supply at the periphery of the downtown and wrap it behind mixed use buildings
- Provide a high quality and convenient customer experience

The Park It! Smart Phone app could show~~s~~ the real-time location of parking and its current price, and allow~~s~~ payments to be made directly from the app.

demand

Building more parking is extremely costly and can take many years to see results. Therefore, managing the parking resources that we already have more efficiently must be ~~the 1st~~our immediate priority to mitigate and/or reduce demand as much as possible.

~~Improve other modes~~Convenient choices

Currently, being car-free in downtown Burlington requires a level of sacrifice, creativity and determination that can stifle even the most planet-loving citizen~~s~~. In order to facilitate ~~a lifestyle~~ choice~~s~~ that reduce~~s~~ the need for parking and make~~s~~ it more affordable for more people to live and work downtown, all other modes of transportation ~~should~~ must be improved. Everyday each of us makes our transportation

decisions based on what is going to be most convenient for that given day. If we want people to be comfortable leaving their car at home, or foregoing car ownership altogether, we MUST offer a suite of transportation choices that are convenient, attractive and affordable. This includes ~~better~~ wider sidewalks and safer crossings, enhanced ~~street~~ connectivity~~,~~ ~~safer~~ of bike routes, more car sharing, and transit that is ~~clean~~predictable, ~~more~~ frequent, runs nights and weekends, and is ~~makes it easy to transport a bicycle~~convenient. Neither buses nor bikes alone will ever be dominant enough to take a big bite out of our transportation and parking challenges. However, as being demonstrated in many other communities around the country, by taking many small bites from several different approaches, we can effectively reduce and manage the demand much more successfully.

Eliminate parking requirements

The cost of land in Burlington's downtown and waterfront is ~~very high~~among the highest in the state, so each parking space required for new development ($25-30,000 if built in a structure) adds a significant cost that ultimately must be borne by future residents and tenants. By eliminating parking requirements in the zoning ordinance, each new development can determine exactly how much parking is needed without wasting land and resources on parking spaces ~~that will not be utilized~~if they can find a more creative way. By reducing the amount of land dedicated to parking spaces and encouraging redevelopment of existing parking lots, Burlington can make more efficient use of precious urban land for more ~~interesting~~ affordable, economically viable and ~~fun~~ dynamic activities than car storage.

Focus on downtown housing

Reducing demand for parking begins with encouraging compact mixed use development that makes it possible for more people to live close enough to work that they can commute by transit, foot or bike. When people can live within walking distance of work, services and entertainment, households can reduce or forego car ownership or participate in a car sharing program. To facilitate this goal, the master plan includes numerous recommendations and opportunities to create additional housing in the downtown and waterfront.

Promote choices for employees

Burlington is fortunate to already have a host of commuting alternatives. One of the biggest challenges, however, is a lack of clear and easy way to find information about the choices and how to access them. The Campus Area Transportation Management Association (CATMA), which serves 10,500 employees at ~~the hill institutions~~UVM, Fletcher Allen and Champlain College, is an example of an organization that is successfully ~~sharing~~ providing information about commuting choices and ~~providing~~ strong incentives, including unlimited transit access, bike/walk rewards, and emergency rides home. With more than 12,000 employees working within a half-mile of the corner of Church and Main, Burlington's downtown and waterfront ~~employers~~ would greatly benefit from a similar program that could ~~serves the needs of~~offer cost-effective and convenient alternatives to ~~their~~ employees ~~while~~ thereby helping to reduc~~e~~ing parking demand and freeing these valuable spaces for visitors and customers. Choosing to take the bus, carpool or bike just one day a week is a 20% reduction in an individual's demand. An expanded Business Improvement District could play a key role in creating and managing an effective transportation demand management program for downtown businesses and property owners.

Create great places

The more inviting and interesting the public realm, the more likely people are to walk instead of drive when given a choice. Through the use of exceptional urban design and complete street standards, Burlington can make its streets more safe and beautiful, and get more people out of their cars and on foot. Examples include wider sidewalks where possible, street trees and benches, quality lighting and better pedestrian crossings.

TOOLS:

- Work closely with CCTA to expand transit service by implementing their Transit Development Plan and constructing a new downtown transit center. (Department of Public Works)

- Work with Local Motion and the Burlington Walk Bike Council to improve the quality of the network and experience for pedestrians and cyclists. (Department of Public Works)
- Work closely with developers to find innovative ways to manage their parking needs. (CEDO)
- Update the zoning regulations to:
    - eliminate the off-street parking required with new development. (Department of Planning & Zoning)
- Develop zoning regulations that:
    - support infill and emphasize active uses at the street level and creation of a dynamic and engaging streetscape.
    - emphasize, encourage, and facilitate the building of more diverse housing downtown, while reducing any existing barriers. (Department of Planning & Zoning)
- Partner with downtown and waterfront employers to create an alternative commuting education and incentive program for employees. (CEDO & Church Street Marketplace)
- Continue to implement the Complete Streets Design Guidelines adopted as part of the 2011 Transportation Plan. (Department of Public Works)

supply

We already know that ~~there is a surplus of parking that should be filled before new parking infrastructure is constructed~~the existing parking isn't being used to its full potential. Finding inefficiencies in ~~lots and on-street~~all parking facilities can optimize our use of the existing supply. Yet b~~B~~uilding some additional parking facilities will still be ~~the last~~ necessary ~~step~~ for Burlington to grow in a smart and efficient way.

~~Existing p~~Parking area optimization and design

~~To optimize the existing areas dedicated to parking, both on- and offstreet, without increasing the land area dedicated to this use,~~Existing parking areas, both on- and off-street, should be closely examined for inefficiencies, and redesigned and restriped accordingly. On street parking layout and striping should be evaluated and any additional room for new spaces should be captured, ensuring no net loss of on-street parking where possible. One design approach that should be implemented is "Back-in/Head-out Angle Parking." Instead of driving forward into an angled parking space, the driver backs in so they are facing out. Dozens of communities across North America have found this to be far safer for motorists, pedestrians and cyclists than the traditional head-in/back-out design. Finally, parking specifically for motorcycles, scooters and bicycles need to be added throughout the downtown and waterfront. It's important that the City supports and facilitates their use, but at the same time ensures that parking spaces for motorcycles, scooters and bicycles are used efficiently given that they don't need the same amount of space as a car. Placing these spaces at the end of a parking block where drivers can see over them could also help with sight distance at intersections for more safety.

Comprehensive parking management, including private parking lots

City parking facilities are going underutilized even during some of the busiest days. However, there are a number of strategies that can be employed to help customers navigate to vacancies in our facilities and expand their use. Some of these include wayfinding and smart technologies discussed elsewhere in this section. Additionally, t~~T~~here is also an abundance of private parking lots that sit underutilized yet are not available to the public particularly on holidays, nights and weekends. A comprehensive approach to parking management could open up some of these private spaces to ~~the public~~other users, generating new revenues for ~~the~~ property owners who are interested in participating. A "parking broker" could manage available spaces on behalf of private owners, matching available spaces with new and expanding businesses, coordinating around special events, and possibly even opening up spaces during posted hours to the general public. A limited example of this type of activity already occurs during the

holidays, so why not try to expand it to other times of the year. There is a real and immediate opportunity for a public/ private partnership, possibly working in partnership with the expanded Business Improvement District who could play a key role in the overall management of downtown parking facilities.

Building new parking facilities

~~Given~~ Despite the current parking surplus and efforts to reduce parking demand, building new parking facilities in Burlington ~~is a last resort~~will still be necessary. The redevelopment of surface lots will both reduce supply and add significantly more demand over time. While overall demand is lower than optimal, there are parts of the downtown that are underserved. ~~Nonetheless, when the current surplus is fully and efficiently utilized, building new parking facilities may be necessary. Additionally, in areas where new development is anticipated to occur, it may make sense to build parking facilities to accommodate a future increase in demand and to replace surface parking lost to redevelopment.~~ The~~is~~ master plan illustrates a number of locations where new parking garages could be located ~~now and as development occurs~~ (see the Connectivity and Around the Plan sections~~, Page 79~~). In all cases, ~~these~~ any new facilities should be wrapped with mixed-use buildings to screen the parking ~~decks~~ and activate the street. Garages should incorporate smart-parking technologies to maximize their efficiency and ease of use, and should also accommodate space for bike lockers, motorcycles and scooters, which consume less space. Finally, the City will never have the resources to do this alone so there are opportunities for the private sector, or even public-private partnerships, to step in and help build future parking facilities.

TOOLS:

- Identify priority locations and funding for new parking garages. (CEDO & Department of Planning & Zoning)
- Create a public-private partnership to:
  - develop new parking facilities.
  - provide parking brokerage services and facilitating sharing of parking facilities among downtown businesses and provide other parking and transportation management services.
  - maximize efficiency of parking areas, including City-owned spaces. (CEDO & Church Street Marketplace)
- Redesign areas of angled parking on-street and in parking garages to back-in/head-out where appropriate. (Department of Public Works)

location

Even if all of our demand reduction measures are successful, the automobile will still be the primary mode of travel to and through the downtown for the foreseeable future. ~~Therefore, it is necessary to manage the parking that does take place.~~ Strategies that focus on where people are parking should be implemented. All efforts should ~~be made to~~emphasize a ~~reallocate and~~ better balance ~~demand~~ of parking supply away from the core of the downtown~~areas that are currently over-parked into areas with excess parking supply~~.

Parking on residential streets

Commuters are typically parking at times when residents are at work, while residents need the parking at night when commuters have gone home. There is an opportunity for the City to re-define ~~the~~ its residential parking system to limit the total number of permits issued ~~to resident~~along residential streets~~s~~ and to make those permits good for evening and night hours rather than during the day. With a time-sensitive permit system like this, commuters and shoppers can ~~park on~~both use residential streets for parking when it suits them most.

Shared parking

Shared parking allows nearby property owners to share a common parking facility, rather than maintaining two separate facilities. This also allows for more efficient parking lot design for adjoining lots and makes better use of the aggregate spaces that are available. Since uses that share the spaces may have peak parking demands that differ by time of day, fewer total parking spaces are typically needed. Shared parking also has the advantage of improving development feasibility, helps increase densities, and promotes mixed-use and pedestrian activity.

Remote ~~lots & garages~~parking with shuttles

Parking should be developed on the periphery of the downtown and waterfront rather than right in the middle. This way, cars don't have to enter the most congested part of the city, and this valuable real estate can see more pedestrian-supportive redevelopment and activity. This is especially true on the waterfront where parking should be provided primarily upland of Battery Street. With the creation of more remote lots at the major access points to the city or even throughout the region, ~~users~~ drivers can park outside of the city and take a ~~quick~~ shuttle or CCTA bus downtown. Burlington is currently looking into the feasibility of an intermodal transit and parking facility at Exit 14 in South Burlington and another site in the southern approach to the City ~~South End Transit Center~~, adding to the menu of choices available to commuters. The monthly price to the commuter, including the bus ride, c~~w~~ould be much cheaper than monthly parking rates downtown, encouraging at least some commuters not to drive all the way ~~in~~.

TOOLS:

- Create a public-private partnership to facilitate sharing between private and public parking spaces to maximize efficiency. (CEDO & Church Street Market Place)
- Implement the regional park and ride plan and exit 14 intercept lot study. (Department of Public Works, in conjunction with the Chittenden County Regional Planning Commission)
- Identify key parking locations on the City's Official Map to at least ensure an opportunity to consider the development of parking on these sites. (Department of Planning & Zoning)
- Work with the owners of key parking locations on the periphery of the downtown and waterfront to develop shared parking facilities. (CEDO)

time & price

The duration of a car's stay is a key element in the success of any parking management strategy. Time limits are put in place to regulate the turnover of spaces in the system. In some cases a faster turnover is desirable and in other contexts all day parking is appropriate. The price of parking goes hand in hand with time limits and should respond to supply and demand market forces. Parking prices should be ~~created~~managed ~~with the intent of reducing occupancy~~in such a way that the cost is higher in ~~high demand~~for premium parking areas and ~~to increase the~~lower in less desirable~~ility of~~ areas~~off-street parking.~~

Price-Based Regulation

Industry standard says that an optimal parking occupancy rate is 85%. According to the Phase 1 Parking Study, there aren't any zones within downtown Burlington that have an occupancy rate higher than 77%, whether ~~onstreet~~on street, surface lots, or parking garages. ~~While Burlington currently has a surplus of parking, as the master plan is implemented and demand for parking increases, p~~Parking occupancy should ~~continue to~~ be monitored on a regular basis to identify areas where ~~there may be a need for price-based regulations of on-street spaces in order to achieve the optimal occupancy rate~~parking utilization is highest and opportunities for different management strategies may present themselves. The following strategies can be deployed independently or as part of a more ~~elaborate~~ comprehensive pricing system.

Geographical Pricing: The development of a successful on-street parking management system relies upon the development of a coordinated and comprehensive parking management system that prioritizes parking spaces based on convenience and proximity to popular destinations. Just like any business sells their most desirable goods and services at a premium price, the most convenient and prized parking spots—usually on-street parking near popular destinations—should be priced in the same way. When determining the market rate for an on-street parking space, prices should be set so that, at any given time, only 6 or 7 spaces out of every 8 spaces are occupied on a given block. If all of the spaces on that block stay occupied, the price is too low. The highest hourly rates should be assigned to areas around Church Street, Main Street, City Hall, and the ~~South End~~Waterfront, with progressively lower rates as the distance from these areas increases.

Time of Day Pricing: A variable pricing strategy can also be employed that varies prices based on time of day, with higher at peak times for parking demand. By using real-time space availability sensors for both on- and off-street parking, as well as networked meters, demand can be determined immediately, with automatic price adjustments showing on meters across the system.

Length of Stay Pricing: Price can also be based on the duration of a visit so that each successive hour is more expensive than the last. By charging a higher hourly meter rate for each additional hour, short-term parking is encouraged and turnover increases, while providing flexibility and convenience to users. Typically this strategy has no time limit set - it simply relies on the escalating cost as an incentive for turnover, making it ideal for retail streets, where parking turnover equals sales.

Tiered time limit regime

In order to maximize the use of available off-street parking spaces, a tiered time limit system should be created that shares parking between user groups with different demand times. For example, in some areas parking spaces ~~in surface lots or parking garages could be utilized by office users~~ with a 10-hour time limit could be utilized by office users to then make these spaces available for patrons of restaurants and bars that would arrive at the end of a work day. The same could be done in private lots where leases could be structured for business day, night and weekends, or 24/7 use and priced accordingly. In such a case, parking tenants who don't need a space on nights and weekends, for example, don't have to pay for it and these spaces could be made available to another customer during the other periods. The system would need to be carefully customized to balance the specific user groups that exist in proximity within downtown Burlington.

Ultra-Short Term Parking

In order to facilitate fast turn-over of on-street parking spaces particularly in front of retail storefronts, some amount of ultra-short term parking should be provided. In some cases a "first 15 minutes is free" program could be implemented in which a button on the meter is pressed to provide 15 minutes of free parking without inserting any form of payment. This program could be available for all on-street parking spaces within the downtown core to promote high turnover of on-street spaces.

~~**The price of parking goes hand in hand with time limits and should respond to supply and demand market forces. Parking prices should be created with the intent of reducing occupancy in high demand areas and to increase the desirability of off-street parking.**~~

Unbundle parking from building and housing prices

~~P~~The cost of parking is typically ~~included~~ embedded in residential purchases and rentals, so residents often don't realize the true cost of using valuable land for parking ($~~30~~25,000 to $40,000 to develop each structured space in downtown Burlington). Simply revealing the true cost of parking is one of the most effective means of reducing overall parking demand, since many residents will opt to give up their vehicle and use transit over paying extra for a parking space if given a choice. With unbundled parking, residents buy or rent each parking space separately from the residential unit, helping to reveal the true cost of storing each car. ~~By e~~Eliminating parking requirements in the zoning ordinance is the best way to enable

this, allowing parking to become s a supply and demand commodity, and that developers are free to build or land owners are free to build as many or as few parking spaces they believe consumers will rent or buybe willing to pay for.

TOOLS:

- Install smart parking meters in surface lots, on-street and in parking garages that can measure usage and be easily programmed for different times and rates. (Department of Public Works)
- Regularly conduct parking utilization studies to understand how the parking resources are being used and identify opportunities for different management strategies. (Department of Public Works)
- Update the zoning regulations to:
  - eliminate the off-street parking required with new development.
  - include incentives for developers to unbundle parking. (Department of Planning & Zoning)
- Create a public-private partnership to provide parking brokerage services and facilitating sharing of parking facilities among downtown businesses. (CEDO & Church Street Marketplace)

user experience

Last but certainly not least, the parking experience for the customer needs to be convenient and inviting. In order make parking options, such as surface lots and garages, more appealing options, it is necessary to change the user's perception of them. If they are poorlyAll parking needs to be designed, hard easy to find and navigate, convenient to use, and difficult to walk to and from once you have parked, people won't use themclean and well-maintained. The highest quality customer service and experience is necessary if people are going to come and use them.

Smart Technology

Real-time space availability sensors, networked meters, and other technological advancements in parking management make the user experience more enjoyable, reduce traffic, increase business and parking revenues, simplify the process of adjusting prices, and can maintain data about ongoing utilization. Smart parking meters that accept credit cards or cell phone payment should be deployed throughout the Downtown and Waterfront. Advancements in meter technology such as solar power and smart networking should be strongly considered. Pay-by-Space meters should be considered for surface lots and parking garages, offering an advantage over Pay-and-Display parking in that the consumer does not have to walk back to their vehicle to display a permit on their dashboard. Pay-by-Space is ideal for large lots where a limited number of meters can be placed at strategic locations. The cCity could also consider advanced wayfinding that links smart networking with a Parking App for smart phones and tablets that shows the real time location of available parking and its current price, as well as allowing payments directly from the app. This –app could be integrated with the a Park It Burlington! web page. The Smart Technology should begin with on-street smart meters at high occupancy locations near Church Street and to on the waterfront and in parking garages. Surface lots should then be fitted with Pay-and-Display starting with lots adjacent to Main Street, the Library, YMCA, Waterfront Park, Browns Ct, the Fishing Pier, Moran Center, and Elmwood.

Wayfinding

Parking wayfinding signage is already in the works in an effort to create a consistent, clear, and helpful system that helps people find parking lots and garages. In addition, the wayfinding signage will indicate when a parking garage is full and direct drivers to nearby garages. In addition to the more formalt wayfinding signage, additional complementary signage could be created by local artists using forms such as classic mural, painted wall signs, or other context appropriate applications.

Safe, clean and welcoming

Just like in any business operation, customer service is the name of the game. Parking should be no different. If customers don't feel safe, they simply won't use them. All parking facilities, but especially structures, **MUST** be clean, well lit and maintained, and attractive. Some operators even offer additional premium services like valet parking, washing and detailing. Many lessons can be learned from retailers whose business can live and die depending on the level customer service. This is another example where an expanded Business Improvement District who could play a key role in the overall management of downtown parking facilities.

Alley, parking garage, and lot entrances

Entrances to off-street parking facilities should be designed as gateways with a consistent aesthetic, in the same way transit stops are often a designed so they are easily identified and located. Often there are circumstances that require garage or surface lot entrances to be one way. When this occurs the "No Entrance" signs alerting drivers of this should have directions to the closest garage or lot entrance.

TOOLS:

- Update the zoning regulations to provide design guidance. (Department of Planning & Zoning)
- Complement the wayfinding signage with an illustrative plan that shows the location of all parking lots and garages in the Downtown and Waterfront and the pedestrian connectivity from them to other key locations in the City. (Department of Public Works)
- Create a public-private partnership to maintain and operate downtown and waterfront parking facilities to the highest quality customer service standards. (CEDO & Church Street Marketplace)
- Install smart parking meters in surface lots, on-street and in parking garages that can measure usage and be easily programmed for different times and rates. (Department of Public Works)